AOSE ADVISORY COMMITTEE
DRAFT MEETING MINUTES

On September 22, 2006, the AOSE Advisory Committee met in the Fifth Floor Conference room of the Office of Environmental Health Services, 109 Governor Street, Richmond, Virginia 23219. Some members attended by video-conference. The following committee members attended in person or via polycom:

- Charles "Chip" L. Dunn, Jr. P.E., AOSE;
- Wayne Fenton, Well Driller;
- Andre Fontaine, P.E., Real Estate Agent;
- David Fridley, Virginia Department of Health, Three Rivers Health District;
- David Waldrep, Virginia Department of Health, Piedmont Health District;
- Dan Horne, Virginia Department of Health, Virginia Beach Health District;
- Curtis H. Moore, AOSE, CPSS;
- Pam Pruett, AOSE;
- Neal Spiers, AOSE, CPSS;
- Dwayne Roadcap, Facilitator, VDH-Division of Onsite Sewage & Water Services; and

Handouts for the meeting included the following:

1. Performance of Chambers
2. ISI request for policy change
3. Powerpoint presentation from ISI
4. Future Discussion Topics

Committee Purpose: The Advisory Committee makes recommendations to the Commissioner of Health on policy, procedures, and regulations for the Authorized Onsite Soil Evaluator (AOSE) program. The committee's discussion and recommendations are only limited by what the Committee wishes to address. Committee members and stakeholders may attend meetings via remote locations through the health department's polycom system.

Committee Decisions: The committee reaches all decisions using a "full-consensus" mechanism, meaning that all members in attendance must agree before a recommendation is sent to the Commissioner. Members who do not attend a meeting are expected to support their fellow members on decisions reached in their absence.

Ground rules:

1. Respect all views and welcome new ideas.
2. Participate, be candid, and avoid personal attacks.
3. Be respectful when you have the floor. Keep comments pithy and concise. Limit speaking time to assure that all members have an opportunity to be heard.
4. Listen for new understandings and offer new perspectives.

5. Focus on agenda and topic. Assist facilitator and chairperson in keeping the discussion focused and on topic.
6. Avoid "side bar" conversations and hidden criticism.

The Committee will seek non-committee input on an as-needed basis. The facilitator or chair person may recognize a non-member. Depending on the flow of discussion and the topic, the chair person could allow non-committee participants to interject without being recognized on a case-by-case basis.

Committee Discussion:

Curtis Moore discussed how he, as a member of the Virginia Association of Professional Soil Scientists (VAPSS) and Virginia Onsite Wastewater Recycling Association (VOWRA) and a few others with those organizations, were working with the contract soil scientists from Virginia Tech to develop the site and soil criteria for the regulation revision. Moore stated that the initial planning involved developing a "how to" manual rather than pass/fail standards. As a starting point, the group was looking to use the ASTM standard. The ASTM standard developed practice for use of permanent and semi-permanent markers, benchmarks, and measurements. He stated that there was no A to Z process for establishing site suitability so the group was wrestling with a number of issues. He thought there would be a section on using Ksat and use of constant head permeameters. Where a dispute in depth to a limiting factor arose, maybe the manual would prescribe a watertable study to resolve the dispute.

The next discussion involved the E.L. Hamm report. Roadcap noted that the report was now located on the VDH website and that it could also be found on the VOWRA website. Roadcap gave some background information on the report's development. One committee member suggested that the EL Hamm report touched on a very important issue: the public was often referred to an AOSE with wrong information or given the wrong impression. This member suggested that VDH environmental health specialists (EHSEs) and administrative staff needed to understand the AOSE program better. AOSEs needed proper referrals. If a customer were told that they could not get a conventional type of system, then they would not go to the AOSE expecting that type of system. This person stated that the public does not understand the paperwork and process for AOSE consultative services.

Another member stated that VDH needed to work closely with local government to address the recommendations in the EL Hamm report. Right now, VDH is closely tied to local government wishes because VDH is jointly funded from state's general fund and local budgets. This person noted that in Fauquier County, an owner would pay $1,300 to a get a permit for a Puraflo system. The state is in an awkward position and handicapped in its response to local government's desire to perform land use planning via the sewage system program. Many local governments had a different standard or planning philosophy than VDH. On one hand, VDH and local government is worried about water quality and nutrient impacts while on the other hand, just local government is worried

about land use planning. VDH is not worried about a local government's land use planning when it should be more focused in that area. VDH can't get out of land planning because of its funding from local government.

One member noted that Fauquier County has court case about the Dillon rule but he felt it was an ambiguous finding from the judge. This member stated that the county apparently has the right to impose rules but he was not sure whether the county could have a stricter requirement than the state. One person stated that he actually observed a county ordinance that was more relaxed than the state requirement.

Referring to the EL Hamm report, one person noted that to make a business model change, structural changes were needed. Right now, VDH's policy and regulation development arm does not supervise the implementation side.

Another member stated that many health department staff were ready to change business models but they needed to better understand their new roles within a changed business plan. Tell staff: "here's our new job". Staff fear that their pay grade will be lowered with a business model change. The public wants to know how products and service delivery will be improved upon. This person stated that he has not heard how that marketing can happen. Many thought that the problem was marketing a business model change to the public and legislators.

Another major issued not directly addressed by the EL Hamm report seemed to be funding. One member noted that the EL Hamm report was silent on where the money would come from to change VDH business processes. This person saw two reactions to the report, (1) "unpleasantness with the current business model" and people feel that they are not being used for public health objectives; and (2) they don't know what a business model change would mean, hard to know how they feel about it until the details are filled in. Do you change the business model and define roles to fill need; or do you define new roles and trust the business model will change? Do both need to be addressed at the same time? One person stated that it was the Health Department's responsibility to assure that sewage systems adequately performed. This person felt that it was not necessarily important who did the work as long as it was done appropriately. Everyone wants a good QA program and everyone wants a checks and balances system.

Another person noted the concern about the health department's brain drain. VDH staff were becoming less familiar with newer systems. What will VDH staff's future job be? On the other hand, VDH staff are not paying attention to the alternative and newer technologies because it has such a weird role in the onsite program. Staff desire to change, but want to know, "what would that mean for me?"

Many members thought that selling a business model change to local governments would be a difficult sell. Local governments were thought to need a lot of coaxing and convincing to allow VDH to change its business model. Past history indicates that changes will be too slow or they won't come at all. If VDH is going to change, let's "just

do it." Staff need new training, may take more time than they are willing to have patience with.

One person do people think that the current business model is not working? The answer, from this person was that, no, the current business model works for what it is. The AOSE program started in 1999. How long will we be in transition? I don't see an end to the transition. We should try to keep the good parts as we move forward. Can't throw the baby out with the bath-water.

As the committee continued to discuss details from the EL Hamm report, one person stated that he wanted the committee to address more urgent short-term problems; specifically, the issue of inconsistency. For example, the VDH-DPOR issue of what is the practice of engineering. This issue is time-sensitive to the industry. State and everyone keeps talking, but no change is made. It takes too long to do some things. Official ruling from DPOR, the state is breaking DPOR policy. People pick sides, everything goes into limbo and shuts down until an answer is delivered. If policy is written one way and then a new interpretation comes down, then we as AOSEs need that information as quickly as possible.

Another pressing issue involves using Ecoflo and pumping to trenches 11-inches deep. For the past 6 ¾ years, this member stated that he could use the PSA 240L pump. The pump is specified in the GMP. This person stated that he was not required to time dose behind the Ecoflo unit but now it is being mandated. Do the GMPs supercede the regs or is it a mixed bag? This person also said that a GMP may give a particular system approval to do certain things but how does one draw a line between the GMP and the regulations. If a particular issue is not addressed in the GMP, then go to the regulations.

Another person responded that these issues should be in the design standards for the Ecoflo GMP. The Ecoflo GMP does not say that time-dosing is required. Rather, the GMP says you can gravity flow to trenches. The regulations talk about time-dosing for trenches less than 12-inches deep. The regulations always prevail over a GMP.

This member simply asked for an answer. He did not care what the answer was, he just wanted a consistent answer that could be applied across health district lines. "I was able to do it without time-dosing before. Now, I must time-dose. If mistake is discovered and the interpretation is changed, now we have a bunch of legacy systems that were approved in error. But they aren't wrong; they were approved using the interpretation in effect at that time. After 7 years, I was doing it one way and now I'm having to do it another way".

The regulations are complicated and GMPs can be too. The distribution of the answer is one issue but the bigger issue deals with, "do people understand and have the same meaning once the answer is distributed?" This person thought that this conversation could lead to a slippery slope of interpreting the regulation by GMP, then having to interpret the interpretation of the GMP's meaning. This issue was the very first issue

discussed by the committee and the committee has discussed the consistency issue for more than 1-year. How do people get the right information? How can we make sure that people take the correct meaning away from a rule? This person suggested that we needed root cause analysis and better distribution.

Roadcap reminded the group that they had developed a process for trying to address inconsistencies from across district lines. Basically, the petitioner would write to the committee or a member of the Division and detail the inconsistency and where it was occurring. The Division would try to determine why the inconsistency developed, how to prevent it from re-occuring, and answer the question. To date, the committee nor the Division had received any letter about any inconsistency.

One person suggested that the root cause was that the rule developers were not in control of those implementing the rule. The EHSes can do what they want and it has to go up and down a flow-chart hill to get changes. We need a more direct link between those who implement the rule and those who develop the rules. Intent of the rule developer is somehow confused by the time the message is delivered to the implementers.

One member suggested that the new regulation development process could help with many of these issues. While not an immediate answer, maybe the regulations could address. In the past, we have said that GMPs were lacking and are not design manuals. Maybe that could be further developed so that the regulations would require design manuals. That's the crux of the prescription design manual to answer the questions after working its way through a technical review committee. Need a design manual, start-up, O&M.

Changing discussion topics, one member asked whether VDH required continuing education for its staff? Is there a re-training mechanism for staff? Roadcap asked the VDH committee members to discuss how staff kept abreast of changes in the onsite sewage program. These members responded that staff kept current in the program by attending quarterly staff meeting and via email communication with peers and supervisors.

Roadcap then asked the private sector members to discuss how they remained current in the onsite sewage program. They responded that they also used email to keep current. However, they also attended manufacturer specific training sessions and/or attended professional conferences.

The committee noticed that the EHSes and private sector folks were not interacting on a routine basis for developing their training and staying current with concepts in the program. The committee brainstormed ideas to increase interaction. VDH members noted that they could hold quarterly meetings and invite neighboring health districts; or perhaps, invite AOSEs and central office to attend. This would be one change at the local level that could encourage more cooperation. Instead of interacting on a problem issue, people would be engaged in learning together. Such dialogue could help build

trust between the rule implementers and those in the private sector trying to follow the rules.
One person also suggested that like the food program, the onsite program should require staff to be re-standardized periodically. This person suggested that EHSes have a regional or statewide level for standardization. At a minimum, need updates more frequently and probably should have it inter-jurisdictionally. Cross-district regional meetings would improve learning.

The committee also discussed whether VDH should have an implementation manual to go with the new regulation development, like that which is provided for the AOSE regulations. Another person suggested that DOSWS hold its own regional meetings for question and answer sessions. Improving dialogue on all fronts would be beneficial and would help with inconsistency. How can we better clarify the gmps? At the local level, we rely on the central office for gmps. The answer lies in better communication so that equal understanding can exist.

The committee then focused on Infiltrator Systems, Inc.'s request to modify chamber approvals in Virginia. Please refer to Carl Thompson's powerpoint presentation for more information. The powerpoint presentation can be found on the VDH website, under the AOSE Program link, and in the tab for committee minutes. The ISI request and paper on chamber performance is also part of the meeting minutes.

Some committee members stated that they did not want contractors to make design decisions. The issue was not about whether the designer trusted the product. For example, pick any treatment unit. Every designer and every contractor might have a preferred treatment device and those reasons could be very individual. I like Ford but I don't like Chevy. Everyone's experience with the product is different. This person felt that the ISI request was giving uncertified contractors the ability to force the designer to sign-off on a product that he might does not agree with or simply dislikes for any number of possible reasons. Ultimately, the health department is in the driver's seat. If an AOSE refuses to approve an inspection because the contractor inserted a product that the AOSE did not like, then the health department will be forced to approve it.

What happens if the AOSE refuses to issue an inspection statement even if the installation complies with the regulations? Right now, an AOSE can specify Sch. 40 pipe for the header lines when 1500 pound crush strength is ok. VDH now says that if the AOSE refuses to issue a completion statement, then the owner must get another AOSE to furnish a completion statement. What if the contractor installed 1500 pound pipe and the AOSE refuses to sign off on it? The contractor has complied with the rules but the AOSE says that's not good enough for my work. Why would this issue be any different?

Another person asked, does it matter who does the design? If the owner chooses to do a reduced sized system with a waiver, it shouldn't matter to the private sector designer because it does not matter with the public sector AOSE/designer (ie. VDH). In other words, as a VDH employee and AOSE, I cannot design components that exceed the

minimum requirements of the regulations. Why should private sector AOSEs have a different working standard than the VDH AOSE?

Another person asked, what's the advantage to the consumer by not authorizing the change as ISI seeks? The selection of the drainfield is approved. Replacing one component with a different component is not a design issue—it's prescriptive regulations. There should be no liability with granting a 25% reduction and the AOSE probably has less liability because the manufacturer must warranty the system for five years. Let it be an installer/homeowner issue rather than a design issue.

Another person suggested that owners have a right to be informed and many times they are out of the loop on substituted systems. If systems are ok with a reduced size, then they are ok—hopefully people are informed but the system should still be ok.

Another person stated that if an AOSE shows whitewater and the contractor installs clearstream, then as an AOSE, I must take my ego out of it, would I have said ok? Is it substantial compliance with the design? There might be times where it won't be ok. For example, I want nitrogen reduction, so I choose certain system. If switched, then I might not be ok with it even if it is approved by VDH.

If the AOSEs refuse to give in, what's the plan? This person thought that there would be a horrible injustice to the public under such a scenario. The existing GMP says that the chambers can provide equal treatment. This person thought that VDH's current policy (GMP #116) has already stated that the 50% reduction is an equivalent system. Another person stated that was not correct. Another member asked whether VDH considered the 25 percent reduction a 1-1 change with a gravel system? The issue seemed to be one of consumer choice and that the footprint should be preserved, just as is currently allowed. Let the consumer be informed, let them sign an acknowledgement of a change to the regulations unless VDH is saying that the 25 percent reduction is the equivalent of a fully sized gravel system. If VDH were stating that the 25 percent reduction were not equivalent, then maybe VDH was simply stating that it's prescriptive gravel designs were over-designed by 25 percent. When VDH changed the regulations, it could reduce the size of all systems by 25 percent.

Another person noted that the builder has a building code, if the owner wants less than 2-foot spacing between studs, then the builder can exceed the standard. The cost benefit analysis is made between the owner and contractor. They do not need a P.E. to weigh in to do more than the building code requires. The health department is not responsible for giving the homeowner what they think might be a better system for the owner. The architect (the designer) has no say on changing the stud separation distance. Right now, GMP #116 says that the AOSE must sign-off on the installation. Can we say "may" instead? The installers would have to figure out which AOSEs care and which ones don't.

The owner notification is not accomplishing what it was intended. When VDH employee issues permit, he has to write it for a gravel system. The AOSE is not held to that same standard. The AOSE can show gravel trenches, but he does not have to. In any case, there is a 99% certainty that you can do the reduction. Why not let the contractor make that call? Maybe it's my illusion, having the contractor specify a reduction helps the AOSE. It's not the AOSE's decision, someone else made a decision. It separates the AOSE from the decision a little more if a problem develops.

If the system is in the ground and AOSE refuses sign-off, then what happens? Could we have a statement that it does not meet the design but does comply with the regulations? Yes, you could do that but the health department would treat that as an approval.

One member suggested shifting the burden of this issue to the manufacturer instead of the AOSE. Another member liked that idea. The AOSE could set the tone for the permit, but he could approve it for meeting the regulations but not the design. The manufacturer would have a sign off for any manufacturing change.

If the AOSE says no to chambers, but they are installed and comply with regs, who approves?

1. Sign off that it complies with regs, not design
2. Manufacturer assumes more responsibility
3. Use the word "may" instead of "shall" comply in the policy

The designer's concern that changing the policy might lead to liability and early failures. One person noted that the presently used GMP doesn't add or subtract regarding the liability issue. It's not an engineering design decision. VA has large systems, a 25% reduced system in Virginia is still larger than gravel systems approved in NC. Manufacturers taking steps to make things easier for the consumer and eliminating unnecessary paperwork is a good cause. Reduced paperwork will eventually reduce costs because of less burdensome paperwork.

One member stated that even if VDH allowed for a 25% reduction without owner sign-off, then some AOSEs will not approve the switch. For those situations where the substitution doesn't make sense, what can we do? These are choices of distribution systems. If AOSEs don't want to use a particular product, then they won't give their clients that product.